

✓ at least two tubular portions [(8; 8'; 8"; 8'''; 8''''') which are] arranged adjacently in a [the] longitudinal direction of the stent [(1; 1'; 1"; 1'''; 1''''')] and which comprise a plurality of interconnected, substantially cell-shaped elements [(10; 10'; 10"; 10'''; 10''''')] which have an orientation and are connected together in the longitudinal direction of the stent [(1; 1'; 1"; 1'''; 1''''')] by way of at least one first connecting means [(20; 20'; 20"; 20'''; 20''''')],

wherein the elements [(10; 10'; 10"; 10'''; 10''''')] are of such a [an arrangement and/or] configuration that the ends of the elements [(10; 10'; 10"; 10'''; 10''''')] which are in the longitudinal direction of the stent [(1; 1'; 1"; 1'''; 1''''')] define an edge contour [(36, 37, 38; 36", 37", 38"; 36''', 37''', 38''')] extending around the stent [(1; 1'; 1"; 1'''; 1''''')] in a wave-like configuration in a [the] peripheral direction thereof, characterised in that the mutually adjoining edge contours [(36, 37; 36", 37"; 36''', 37''')] of said at least two tubular portions [(8; 8'; 8"; 8'''; 8''''')] extend around the stent substantially in an in-phase relationship.

Fig. 7
✓ 2. (amended) The [A] stent as set forth in claim 1 wherein [characterised in that] the edge contours [(36, 37; 36", 37"; 36''', 37''')] of the two tubular portions [(8; 8'; 8"; 8'''; 8''''')] engage into each other in the manner of a tooth configuration.

✓ 3. (amended) The [A] stent as set forth in claim 1 wherein [or claim 2 characterised in that] the two edge contours [(37, 38; 37", 38"; 37''', 38''')] of one of the [a] tubular portions [portion (8; 8'; 8"; 8'''; 8''''')] extend substantially in in-phase relationship with each other or displaced substantially through half a period relative to each other.

112 2nd ✓ 4. (amended) The [A] stent of claim 1 wherein [as set forth in one of the preceding claims characterised in that] the first connecting means [(20; 20'; 20"; 20'''; 20''''')] connects together elements [(10; 10'; 10"; 10'''; 10''''')] of the same orientation [together].

✓ 5. (amended) The [A] stent of claim 1 wherein [as set forth in one of the preceding claims characterised in that] the first connecting means [(20; 20'; 20"; 20'''; 20''''')] is of a bar-like configuration.

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6. (amended) The [A] stent of claim 1 wherein [as set forth in one of the preceding claims characterised in that] the first connecting means [(20; 20'; 20"; 20'''; 20''''')] extends substantially parallel to the longitudinal axis of the stent [(1; 1'; 1"; 1'''; 1''''')].

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✓ 1037. (amended) The [A] stent of claim 1 wherein [as set forth in one of the preceding claims characterised in that] there are no more than [provided at most] two [and preferably one] first connecting means [(20; 20'; 20"; 20'''; 20''''')] for connecting adjacent tubular portions [(8; 8'; 8" 8'''; 8''''')].

✓ 8. (amended) The [A] stent of claim 1 wherein [as set forth in one of the preceding claims characterised in that] there are [provided] more than two tubular portions [(8; 8'; 8" 8'''; 8''''')] and the first connecting means [(20; 20'; 20"; 20'''; 20''''')] are arranged in displaced relationship over the length of the stent [(1; 1' 1'''; 1''''')] from one portion [(8'; 8"; 8'''; 8''''')] to another portion [(8'; 8"; 8'''; 8''''')] in the peripheral direction of the stent [(1'; 1"; 1'''; 1''''')], preferably being displaced by at least half a period of the edge contour (36, 37, 38; 36", 37", 38"; 36''', 37''', 38''').

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9. 103 (amended) The [A] stent of claim 1 wherein [as set forth in one of the preceding claims characterised in that] the elements [(10''')] of at least one portion [(8''')] are connected in the peripheral direction of the stent [(1''')] by way of second connecting means [(14.1, 14.2)] which are arranged inclinedly with respect to the peripheral direction [and which preferably extend in an S-shape, wherein second connecting means (14.1, 14.2) facing in the same peripheral direction of elements (10''') in mutually adjoining relationship in the longitudinal direction of the stent are arranged inclinedly in opposite relationship with respect to the peripheral direction].

✓ 10. (amended) A dilation catheter comprising a stent [(1; 1'; 1"; 1'''; 1''''')] as set forth in claim 1 [one of the preceding claims].

Please add the following new claims:

✓ 11. (new) The stent as set forth in claim 2 wherein the two edge contours of one of the tubular portions extend substantially in in-phase relationship with each other or displaced substantially through half a period relative to each other.

- ✓12. (new) The stent of claim 2 wherein the first connecting means connects together elements of the same orientation.
- ✓13. (new) The stent of claim 3 wherein the first connecting means connects together elements of the same orientation.
- ✓14. (new) The stent of claim 11 wherein the first connecting means connects together elements of the same orientation.
- ✓15. (new) The stent of claim 14 wherein the first connecting means is of a bar-like configuration.
- ✓16. (new) The stent of claim 12 wherein the first connecting means is of a bar-like configuration.
- ✓17. (new) The stent of claim 13 wherein the first connecting means is of a bar-like configuration.
- ✓18. (new) The stent of claim 4 wherein the first connecting means is of a bar-like configuration.
- ✓19. (new) The stent of claim 2 wherein the first connecting means is of a bar-like configuration.
- ✓20. (new) The stent of claim 3 wherein the first connecting means is of a bar-like configuration.
- ✓21. (new) The stent of claim 15 wherein the first connecting means extends substantially parallel to the longitudinal axis of the stent.
- ✓22. (new) The stent of claim 16 wherein the first connecting means extends substantially parallel to the longitudinal axis of the stent.

- ✓23. (new) The stent of claim 17 wherein the first connecting means extends substantially parallel to the longitudinal axis of the stent.
- ✓24. (new) The stent of claim 18 wherein the first connecting means extends substantially parallel to the longitudinal axis of the stent.
- ✓25. (new) The stent of claim 5 wherein the first connecting means extends substantially parallel to the longitudinal axis of the stent.
- ✓26. (new) The stent of claim 19 wherein the first connecting means extends substantially parallel to the longitudinal axis of the stent.
- ✓27. (new) The stent of claim 2 wherein the first connecting means extends substantially parallel to the longitudinal axis of the stent.
- ✓28. (new) The stent of claim 3 wherein the first connecting means extends substantially parallel to the longitudinal axis of the stent.
- ✓29. (new) The stent of claim 4 wherein the first connecting means extends substantially parallel to the longitudinal axis of the stent.
- ✓30. (new) The stent of claim 2 wherein there are no more than two first connecting means for connecting adjacent tubular portions.
- ✓31. (new) The stent of claim 27 wherein there are no more than two first connecting means for connecting adjacent tubular portions.
- ✓32. (new) The stent of claim 26 wherein there are no more than two first connecting means for connecting adjacent tubular portions.

✓ 33. (new) The stent of claim 21 wherein there are no more than two first connecting means for connecting adjacent tubular portions.

✓ 34. (new) The stent of claim 22 wherein there are no more than two first connecting means for connecting adjacent tubular portions.

✓ 35. (new) The stent of claim 23 wherein there are no more than two first connecting means for connecting adjacent tubular portions.

✓ 36. (new) The stent of claim 24 wherein there are no more than two first connecting means for connecting adjacent tubular portions.

✓ 37. (new) The stent of claim 25 wherein there are no more than two first connecting means for connecting adjacent tubular portions.

✓ 38. (new) The stent of claim 28 wherein there are no more than two first connecting means for connecting adjacent tubular portions.

✓ 39. (new) The stent of claim 29 wherein there are no more than two first connecting means for connecting adjacent tubular portions.

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03/12/07 ✓ 40. (new) The stent of claim ~~6~~¹ wherein there are no more than two first connecting means for connecting adjacent tubular portions.

✓ 41. (new) The stent of claim 33 wherein there are more than two tubular portions and the first connecting means are arranged in displaced relationship over the length of the stent from one portion to another portion in the peripheral direction of the stent.

✓ 42. (new) The stent of claim 35 wherein there are more than two tubular portions and the first connecting means are arranged in displaced relationship over the length of the stent from one portion to another portion in the peripheral direction of the stent.

✓43. (new) The stent of claim 36 wherein there are more than two tubular portions and the first connecting means are arranged in displaced relationship over the length of the stent from one portion to another portion in the peripheral direction of the stent.

✓44. (new) The stent of claim 37 wherein there are more than two tubular portions and the first connecting means are arranged in displaced relationship over the length of the stent from one portion to another portion in the peripheral direction of the stent.

✓45. (new) The stent of claim 40 wherein there are more than two tubular portions and the first connecting means are arranged in displaced relationship over the length of the stent from one portion to another portion in the peripheral direction of the stent.

✓46. (new) The stent of claim 7 wherein there are more than two tubular portions and the first connecting means are arranged in displaced relationship over the length of the stent from one portion to another portion in the peripheral direction of the stent.

✓47. (new) The stent of claim 8 wherein the first connecting means are displaced by at least half a period of the edge contour.

✓48. (new) The stent of claim 41 wherein the first connecting means are displaced by at least half a period of the edge contour.

✓49. (new) The stent of claim 42 wherein the first connecting means are displaced by at least half a period of the edge contour.

✓50. (new) The stent of claim 43 wherein the first connecting means are displaced by at least half a period of the edge contour.

✓51. (new) The stent of claim 44 wherein the first connecting means are displaced by at least half a period of the edge contour.

52. (new) The stent of claim 45 wherein the first connecting means are displaced by at least half a period of the edge contour.

53. (new) The stent of claim 46 wherein the first connecting means are displaced by at least half a period of the edge contour.

54. (new) The stent of claim 41 wherein the elements of at least one portion are connected in the peripheral direction of the stent by way of second connecting means which are arranged inclinedly with respect to the peripheral direction.

55. (new) The stent of claim 8 wherein the elements of at least one portion are connected in the peripheral direction of the stent by way of second connecting means which are arranged inclinedly with respect to the peripheral direction.

56. (new) The stent of claim 9 wherein the second connecting means extend in an S-shape, wherein second connecting means facing in the same peripheral direction of elements in mutually adjoining relationship in the longitudinal direction of the stent are arranged inclinedly in opposite relationship with respect to the peripheral direction.

57. (new) The stent of claim 54 wherein the second connecting means extend in an S-shape, wherein second connecting means facing in the same peripheral direction of elements in mutually adjoining relationship in the longitudinal direction of the stent are arranged inclinedly in opposite relationship with respect to the peripheral direction.

58. (new) A stent, comprising :

at least two tubular portions arranged adjacently in a longitudinal direction of the stent and which comprise a plurality of interconnected, substantially cell-shaped elements which have an orientation and are connected together in the longitudinal direction of the stent by way of at least one first connecting means,

the elements being of such a configuration that the ends of the elements which are in the longitudinal direction of the stent define an edge contour extend around the stent in a wave-like configuration in a peripheral direction thereof, so that the mutually adjoining edge contours of said at least two tubular portions extend around the stent substantially in an in-phase relationship,

the edge contours of the two tubular portions engaging into each other in the manner of a tooth configuration,

the two edge contours of one of the tubular portions extending substantially in in-phase relationship with each other (or displaced substantially through half a period relative to each other,)

the first connecting means connecting together elements of the same orientation,

the first connecting means being of a bar-like configuration,

the first connecting means extends substantially parallel to the longitudinal axis of the stent,

wherein there are no more than two first connecting means for connecting adjacent tubular portions,

wherein there are more than two tubular portions and the first connecting means are arranged in displaced relationship over the length of the stent from one portion to another portion in the peripheral direction of the stent, and

wherein the elements of at least one portion are connected in the peripheral direction of the stent by way of second connecting means which are arranged ~~inclinedly~~ with respect to the peripheral direction.

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